Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently amended) A device for generating images and/or projections by means of an imaging method, which device includes a device for the detection of input radiation which includes at least one acquisition element which comprises a sensor with a Pr^{3+}-activated scintillator for converting the input radiation into UV radiation, a color converter which contains a luminous substance for converting the UV radiation to an optical signal, and a photodiode which converts an optical signal into an electrical signal; wherein the Pr^{3+}-activated scintillator is chosen from the group LuF_3:Pr, $LuCl_3$:Pr, and $LuBr_3$:Pr.

2. (Currently amended) A device for generating images and/or projections as claimed in claim 1, wherein the ~~Pr^{3+}-activated scintillator is chosen from the~~ group further includes ~~$LaPO_4$:Pr, LuF_3:Pr, $LuCl_3$:Pr, $LuBr_3$:Pr, $(Lu_{2-x}Y_x)SiO_5$:Pr, where $0 \leq x \leq 1$,~~ $(Lu_{1-x}Y_x)Si_2O_7$:Pr, where $0 \leq x \leq 1$, ~~$(Lu_{1-x}Y_x)BO_3$:Pr, where $0 \leq x \leq 1$, and $Ca_{1-2y}Li_{2y}SiO_4$:Pr,Na$_y$, where $0.001 \leq y \leq 0.2$~~.

3. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the device is arranged to carry out the PET method as the imaging method.

4. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the device is arranged to carry out the SPECT method as the imaging method.

5. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the device is arranged to carry out the imaging method by means of X-rays.

6. (Cancelled)

7. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the color converter comprises a polymer light guide which is doped with the luminous substance that is excited by UV radiation.

8. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the color converter comprises a polymer light guide and a separate layer with the luminous substance that is excited by UV radiation.

9. (Currently amended) A device for the detection of input radiation which includes at least one acquisition element which comprises a sensor with a Pr^{3+}-activated scintillator for converting the input radiation into UV radiation, a color converter that converts UV radiation to an optical signal, and a photodiode which converts ~~an~~ the optical signal into an electrical signal, wherein the color converter includes a polymer light guide.

10. (Currently amended) A device for detecting input radiation as claimed in claim 9, ~~further comprising a~~wherein the color converter ~~which~~ contains a luminous substance which can be excited by UV radiation, wherein the color converter is arranged between the sensor and the photodiode.

11. (Previously presented) A device for detecting input radiation as claimed in claim 9, wherein the acquisition element comprises an array of photodiodes, and further wherein the array of photodiodes forms a first layer and the sensor forms a second layer, wherein the first and second layers are combined to form a system of layers.

12. (Previously presented) A device for detecting input radiation as claimed in claim 9, wherein a decay time of the scintillator is approximately 9 ns.

13. (Previously presented) A device for detecting input radiation as claimed in claim 9, wherein a decay time of the scintillator is approximately 16 ns.

14. (Previously presented) A device for detecting input radiation as claimed in claim 9, wherein the Pr^{3+}-activated scintillator is $Ca_{1-2y}Li_2SiO_4:Pr_yNa_y$, where $0.001 \leq y \leq 0.2$.

15. (Previously presented) A device for detecting input radiation as claimed in claim 9, wherein the Pr^{3+}-activated scintillator is $LaPO_4$:Pr.

16. (Currently amended) A device for detecting input radiation as claimed in claim 9, wherein the Pr^{3+}-activated scintillator is one of $LuCl_3$:Pr, $LuBr_3$:Pr, $(Lu_{2-x}Y_x)SiO_5$:Pr, where $0 \leq x \leq 1$, and $(Lu_{1-x}Y_x)Si_2O_7$:Pr, where $0 \leq x \leq 1$, ~~and $(Lu_{1-x}Y_x)BO_3$:Pr, where $0 \leq x \leq 1$~~.

17. (Currently amended) An imaging method, comprising:

receiving one of an X-ray and a γ quantum at a Pr^{3+}-activated scintillator, wherein the Pr^{3+}-activated scintillator is one of $LuCl_3$:Pr, $LuBr_3$:Pr, $(Lu_{2-x}Y_x)SiO_5$:Pr, where $0 \leq x \leq 1$, and $(Lu_{1-x}Y_x)Si_2O_7$:Pr, where $0 \leq x \leq 1$, ~~and $(Lu_{1-x}Y_x)BO_3$:Pr, where $0 \leq x \leq 1$~~;

receiving UV radiation emitted from the scintillator at a color converter in response to receipt of the one of the X-ray and the γ quantum;

receiving a light signal emitted from the color converter at a photodiode;

generating an electrical signal in response to receipt of the light signal; and

generating an image based at least in part upon the generated electrical signal.

18. (Previously presented) The imaging method of claim 17, wherein the color converter includes a polymer light guide that is doped with a luminous substance.

19. (Previously presented) The imaging method of claim 17, wherein the color converter includes a polymer light guide and a separate layer with a luminous substance.

20. (Previously presented) A device for generating images and/or projections as claimed in claim 1, wherein the luminous substance includes an organic material.

21. (New) The device for detecting input radiation as claimed in claim 9, wherein the color converter is doped with a Courmarin based substance.